

An Analysis of Requests for Help to a Mental Health Study Center

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SINCE its beginning in 1948, the Mental Health Study Center, a branch of the National Institute of Mental Health, Public Health Service, has provided diagnostic and treatment services to residents of Prince George's County, Md. Experimentation with new techniques has been an important part of the center's mission almost from the beginning. One of the first innovations in the clinical program was started in 1951, when the center initiated a professional referral policy which required that all requests for diagnostic and treatment services be made by a professional person in the community, such as a physician or clergyman (1).

Although a family member might still call the center for help, that person or his family could not be considered for diagnostic or treatment services unless referred by a professional

person. The change in the intake policy did not mean that the center would no longer accept inquiries from lay persons, but it did require that new ways be discovered to assist these people in considering different routes of obtaining help.

For a period of time a secretary took these telephone calls and explained the professional referral procedure. It was felt, however, that persons requesting help of any kind required skills which social workers on the staff possessed. Not infrequently the caller was upset, particularly if it was the first time he had ever asked for help. Sometimes a caller had to be directed elsewhere, and the social workers were knowledgeable about community resources.

This report is based on a study of 365 inquiries for help made by persons on their own initiative. These inquiries were received at the Mental Health Study Center between October 1, 1961, and December 31, 1963. Another study is now in progress of professional referrals to the center.

Although a few of these inquiries came from persons who had walked into the center, most of them were received by telephone. A few requests were made to seek help for a friend or to obtain information about the availability of community resources, but most were made by persons who were seeking help either for themselves or for other family members.

The special focus of this paper is to evaluate the reasons these people gave for seeking help. Our particular interest is related to the primary

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problem which we defined as the most pressing conflict for which the caller appeared to be seeking professional assistance.

Procedures

The data were taken from a one-page schedule designed to record information from inquiries of nonprofessional persons. This schedule had not been designed originally as a research tool and was used for more than 2 years before a decision was made to abstract data from it for this study. In addition to other kinds of information, each schedule included a description of the difficulty for which the person was seeking help. Generally, this description was a highly condensed version of what the person had told the social worker who had talked with him.

A random sample of completed schedules was studied to develop meaningful categories of presenting complaints. Through this procedure a classification of the difficulties was constructed which was based on the descriptions of symptomatic behavior recorded on each schedule. Four general categories were used for classifying the problems. They included (a) intrapersonal conflict, (b) intrafamilial conflict, (c) extrafamilial conflict, and (d) other. Following is a description of each category with examples of the kinds of symptoms recorded.

Intrapersonal conflict. This category included situations in which the symptom occurred within the person or referred to some behavior manifested by the person. Although we recognized that man does not ordinarily live in isolation and that the behavior which we categorized as an expression of an intrapersonal conflict may have been a reaction to interpersonal conflicts, nevertheless these types of behavior symptoms were markedly different from the ones classified as intrafamilial or extrafamilial. The intrafamilial and extrafamilial symptoms more obviously involved relationships between individual persons.

Examples of intrapersonal conflict were (a) specific somatic symptoms such as headaches, (b) irrational or bizarre thoughts, (c) nervous habits such as hair pulling, and (d) negative or hostile feelings.

Intrafamilial conflict. Included in this category were conflicts with members of the nuclear

family consisting of mother, father, and children under 21 years of age and conflicts with the extended family—inlaws, grandparents, adult siblings, uncles, aunts, and adult children.

Examples of these conflicts were (a) marital tension, (b) parent-child conflict, and (c) conflict with other relatives.

Extrafamilial conflict. Included in this category were conflicts which involved family members with members of the community or symptomatic behavior which was manifested outside of the family.

Examples of this category included (a) underachievement at school, (b) inability to work adequately, and (c) delinquent behavior in the community.

Other. This category included a variety of situations which could not be classified in the three categories previously mentioned. Many calls were about situations which were not described in terms of a difficulty but which were requests for information or for help from some other community agency.

Examples of this category included requests for technical and financial information and requests for information on community resources and on hospitalization of persons with psychiatric problems.

We coded the problems and symptoms reported on each of the 365 schedules. In addition, each of us made two kinds of judgments about the nature of the problem—first, the primary problem was selected, and second, all other problems reported were considered secondary and coded accordingly. Although there could be only one primary problem in each case, there could be multiple secondary problems and symptoms. Each of us independently coded every schedule, and the judgments were then compared. Whenever differences occurred about our judgments, a conference was held to resolve the differences. Our goal was to make every judgment unanimous. A two-thirds majority determined the specific categories in which the problems and symptoms were coded when judgments were not unanimous.

Observations

Of 365 inquiries, 211 or 58 percent were concerned primarily with problems of an intrapersonal nature. The primary problem was identi-

fied as an interpersonal conflict within the nuclear or extended family in 14 percent of the calls and as an interpersonal conflict outside of the nuclear or extended family also in 14 percent of the calls. In 12 percent of the inquiries, the person calling seemed to be asking primarily for information about the availability of community resources or calling to complain about them. The frequency with which various symptoms were reported follows.

<i>Categories and symptoms</i>	<i>Number</i>
INTRAPERSONAL	
Negative or hostile feelings.....	100
Specific somatic symptoms.....	70
Diffuse anxiety and nervousness.....	66
Depressed feelings.....	50
Feelings of inferiority.....	40
Organic conditions.....	31
Phobic behavior.....	29
Reaction to recent trauma.....	22
Personal confusion and disorganization.....	21
Immaturity.....	20
Irrational behavior.....	19
Concern about diagnosis of psychosis.....	18
Suicidal thoughts.....	15
Diffuse somatic symptoms.....	12
Drinking problem.....	13
Concern about slow development.....	12
Other.....	35
INTRAFAMILIAL	
General family conflict, parents and children....	59
Parent-child conflict.....	46
Conflict between "grown child" (21 years or older) and parents.....	39
Marital conflict.....	30
Aggression with others in home.....	24
Conflict with other relatives.....	21
Other.....	25
EXTRAFAMILIAL	
Problems with other agency or professional person.....	72
Aggression at school.....	40
Inability to work adequately.....	37
Delinquent behavior with police involvement....	31
Sexual acting out.....	30
Learning problem other than underachievement or reading deficiency.....	26
Underachievement.....	23
Withdrawn from community.....	23
School dropout or refuses to go to school.....	16
Aggression in community without police involvement.....	14
Withdrawn at school.....	13
Other interpersonal conflict.....	15
Other.....	36

NOTE: 19 were not coded because of lack of information.

The most frequently mentioned symptoms were negative or hostile feelings in the person for whom the call was made. These symptoms were reported in 27 percent of the calls. In the intrapersonal category, specific somatic com-

plaints, diffuse anxiety, and depression were also mentioned with great frequency. Less than 1 percent were about senility, which may be because the people in the county are younger than the average for the United States.

Intrafamilial problems were most often described in terms of general family conflict involving both parents and children. Most frequently, the difficulties were described as parent-child conflicts and rarely as marital problems. Few conflicts were reported between a parent or parents and members of the extended family.

At the extrafamilial level, difficulties in relationships with other professional resources were most often mentioned. For example, persons calling the center complained about long waiting periods before intake at other community resources. More often, however, they complained or had questions about the service which they were receiving from other agencies, an issue that was raised in 20 percent of the calls.

Analysis of the role of the person calling in relation to the person called about showed that mothers seeking help for a child were more likely to call than any other group. Forty-two percent of the inquiries were made by mothers and most of these were for difficulties with sons. Only 8 percent of the calls were from fathers about their children.

Most parents who called about problems with their children defined them in intrapersonal terms, but fathers tended to do so more (70 percent) than mothers (55 percent). Conversely, mothers were slightly more inclined to view the primary difficulty in intrafamilial terms (11 percent) than were fathers (7 percent). These differences were not significant, however. Mothers were even more likely to identify the problems as extrafamilial, an observation that was statistically significant. Persons calling about extrafamilial problems as the primary problem in relation to other problems are shown in the following table.

<i>Caller</i>	<i>Extra-familial</i>	<i>Other</i>	<i>Total</i>
Mothers.....	39	113	152
Others.....	11	191	202
Total.....	50	304	354

NOTE: Chi-square = 28.00; *P* = 0.001.

The data further suggested that women were more likely to call for help for themselves. Eleven percent of the total inquiries were made by women seeking help for themselves as compared with 7 percent for men. These differences were not considered significant, however. Virtually no difference was observed in the number of inquiries of wives who called about problems with their husbands (4 percent) and of husbands who called about problems with their wives (3 percent).

The age of the person called about also seemed to make a difference in the way in which the primary problem was described. If the person called about was 20 years of age or older, there was more chance that the problem would be defined in intrapersonal terms. The problems of 68 percent of the persons 20 years of age or older were defined in intrapersonal terms, although the comparable percentage for persons under 20 years was 52. Whether the person 19 and under or 20 years or older called about had a primary problem that was intrapersonal in relation to other problems is shown in the following table.

<i>Age</i>	<i>Intra- personal</i>	<i>Other</i>	<i>Total</i>
19 years and under.....	97	82	179
20 years or older.....	106	46	152
Total.....	203	128	331

NOTE: Chi-square=7.10; $P < 0.01$.

Extrafamilial problems were reported more frequently for those under 20 years old. Whether the person 19 and under or 20 years or older had a primary problem that was extrafamilial in relation to all other problems is shown in the following table.

<i>Age</i>	<i>Extra- familial</i>	<i>Other</i>	<i>Total</i>
19 years and under.....	46	133	179
20 years or older.....	4	148	152
Total.....	50	281	331

NOTE: Chi-square=32.33; $P < 0.001$.

Twenty-five percent of inquiries about children but only 3 percent of inquiries about adults were described in extrafamilial terms. When the person who made the inquiry appeared to be asking primarily for information about the availability of community resources, the per-

centages were 8 percent for children and 15 percent for adults. Problems identified primarily with intrafamilial conflict accounted for approximately 10 percent of the inquiries for both children and adults. These observations were not statistically significant, however.

Another variable which seemed to influence the way in which the primary problem was defined was the source of referral to the center. Each caller was asked how he happened to call the center or who had suggested that he call. Sixty-seven percent of the people calling were self-referred. Generally, they had either found the number of the center in the telephone book or had seen the center's sign. The next largest group were people who had been referred by other mental health facilities (15 percent). Other sources of referral each accounted for less than 10 percent of the 365 inquiries.

When the referral source was a school or other nonpsychiatric resource, the primary difficulty was identified in intrapersonal terms in less than 50 percent of the inquiries. If the caller was referred to the center by a school, he was most likely to define the difficulty about which he was calling in extrafamilial terms. Forty-two percent of persons referred by schools and 12 percent of persons from all other referral sources described their difficulties in extrafamilial terms. School referrals in which the primary problem was extrafamilial are shown in relation to other sources in the following table.

<i>Referral source</i>	<i>Extra- familial</i>	<i>Other</i>	<i>Total</i>
School.....	11	15	26
Other.....	35	257	292
Total.....	46	272	318

NOTE: Chi-square=16.80; $P < 0.001$.

When the referral source was a current or former patient at the center, a psychiatrist, or a family physician, there was a tendency to describe the primary problem in intrapersonal terms in comparison to other referral sources. These differences, however, were not statistically significant.

Discussion

Some interesting issues are raised by the aforementioned observations for caseworkers who are handling initial contacts with appli-

cants or potential applicants to social agencies. Although the first communication of a person seeking help may offer important clues to the underlying conflict with which he is struggling, that message also conveys the differential way in which each person defines his difficulty and identifies his needs.

Did mothers define the difficulties for which they were seeking help in extrafamilial terms because they were more involved and perhaps responsible for the activities of their children in the community? Or did this way of communicating their needs suggest that mothers were more prone to displace or project the difficulty onto a source outside of the home?

The observations suggested that the tendency toward displacement or projection, when it exists, was greatly enhanced by the impact of the referral source. That observation was particularly applicable to referrals from schools in which mothers, rather than any other family member, were almost always involved. Inquiries for help to the center initiated through a person in the school system were often identified with extrafamilial conflicts.

Although no significant differences were noted among other referral sources when each was matched with the primary difficulty, there was a tendency for people referred by medical sources to identify their difficulty in intrapersonal terms. That observation raised the issue as to whether people who went to physicians and psychiatrists viewed their conflicts in intrapersonal terms or whether they were influenced through their contacts with these professionals to define their problems in such terms. A mutual cause and effect relationship probably existed. That is, people go to medical resources with difficulties which they feel are internal either to themselves or to another family member, and this view is further reinforced by the orientation of the physician as he works with them.

Similarly, parents whose children were having difficulties in school may not only view the difficulty as a school-based problem, but that view may be further reinforced as the person in the school system communicated with the family member about the child.

Relatively few people called the center expressly to ask for help for themselves. Generally, people said they were calling for someone

else in the family, even when that person was over age 20. Perhaps we are dealing again with the issue of how much pain is involved in sharing one's conflicts with a stranger. Is it not less painful, for example, to ask for help for someone else who has a problem than to ask for help with one's self or one's relationship with another person? We think it is and the data support this position.

In general, the study told us something about how people come to terms with their problems as they move toward seeking help from a professional source. Regardless of etiology, there are specific environmental forces which significantly influence the ways in which persons seeking help communicate their concerns to a professional person. Because of the special meaning of this communication and the need for immediate diagnostic understanding and intervention, the study suggests that the most skilled professional staff should be responsible for this kind of service.

Summary

An analysis was made of 365 inquiries for help from persons who telephoned or came to a mental health study center on their own initiative between October 1, 1961, and December 31, 1963. Most were seeking help for themselves or for family members.

A one-page schedule, containing a condensed version of what the person had told the social worker who talked with him, was the source of the data. Each author coded one primary problem in each case, although there could be multiple secondary problems and symptoms. If judgments were not unanimous, a two-thirds majority of the authors determined the coding category of the problem.

The authors classified problems as (a) intrapersonal conflict—specific somatic complaints such as headaches, irrational or bizarre thoughts, nervous habits (such as hair pulling), and negative or hostile feelings, (b) intrafamilial conflicts—marital tension, parent-child conflict, and conflicts with other relatives such as aunts and uncles, (c) extrafamilial conflicts—underachievement at school, inability to work adequately, and delinquent behavior in the community, and (d) other—requests for technical and financial information and requests for in-

formation on community resources and on the hospitalization of persons with psychiatric problems.

In analyzing the difficulties as perceived by the callers, the following differences were statistically significant.

Mothers who called about problems of a child were more likely to describe the problems in extrafamilial terms than were other callers.

The problems of persons under 20 years of age were more likely to be described in extrafamilial terms, while those of persons more than 20 years of age were more likely to be described in intrapersonal terms.

Among referral sources the only significant differences were for professional persons in

schools. Callers who were referred by school personnel tended to express the difficulties in extrafamilial terms.

Because of the special needs of the callers and the need for immediate diagnostic understanding and intervention, the analysis suggests that skilled professionals should answer incoming calls for help.

REFERENCE

- (1) Rooney, H. L., and Miller, A. D.: A mental health clinic intake policy project. *Ment Hyg* 39: 391-405, July 1955.

Tearsheet Requests

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Standards for Skilled Nursing Homes

Interim regulations describing the standards to be met by skilled nursing homes have been drawn up by the Medical Services Administration of the Social and Rehabilitation Service.

The new regulations require homes to maintain an organized nursing service supervised by a full-time registered professional nurse on duty during the day shift and either a registered professional nurse or licensed practical nurse on all other shifts.

By July 1, 1970, all licensed practical nurses in charge of nursing activities on any shift must be qualified by graduation from a State-approved school of practical nursing or have background equivalent to such training. Until this time, charge nurses on shifts other than the day shift may be licensed practical nurses whose qualifications are waived by the State licensing agency. Firmness of the 1970 deadline for educational qualifications is underscored by the requirement that any State not meeting this standard by December 31, 1969, must inform the Secretary of Health, Education, and Welfare of its plans for doing so.

If Federal funds are involved in paying homes for care given to patients, these standards must be met. Under the Medicaid program authorized by title XIX of the Social Security Act, skilled nursing home services are one of the five essential services that must be available to eligible patients over 21. More than 30 percent of the funds spent on medical assist-

ance are spent on nursing homes. In fiscal year 1968, the total amount was \$1,068,212,000.

Other standards for skilled nursing homes covered by regulations include:

- Meals in a skilled nursing home must be planned and supervised by qualified professional personnel.
- Standards relating to the maintenance of medical records, the dispensing of drugs, physician coverage, and environment and sanitation must match those in effect for extended care facilities under the Medicare program.
- Nursing homes must have agreements with local hospitals for inpatient hospital care when needed.
- After December 31, 1969, homes must meet the provision of the Life Safety Code of the National Fire Protection Association or a fire and safety code imposed by State law which adequately protects patients in nursing homes.
- The State agency administering Medicaid may grant waivers to standards affecting arrangements for inpatient hospital care and environment and sanitation under some conditions.

In general, standards in the interim regulations match those in the Handbook of Public Assistance Administration, Supplement D, that regulated services available in skilled nursing homes until January 1, 1969, with the exception of the 18-month waiver granted for the employment of charge nurses who are not qualified by formal training.



Comprehensive Health Services Projects. Guidelines for projects under Section 314(e) of the Public Health Services Act, Division of Health Care Services, Community Health Service. *February 1969; 18 pages.* Spells out the various desirable characteristics of a comprehensive health services project to assist applicants for grants under section 314(e) of the Partnership for Health Program.

From Head to Toe. *PHS Publication No. 1808; 1968; 15 pages; 15 cents.* Presents photographs with explanations as a patient goes through the automated multitesting laboratory—a program supported by the National Center for Chronic Disease Control.

Publications Catalog, Community Health Service. *PHS Publication No. 1907; 1969; 62 pages; 35 cents.* Lists approximately 200 publications related to Community Health Service programs, including those produced by the Community Health Service as well as other government and nongovernment sources. Includes brief description of each publication and identifies the source from which the publication may be obtained.

The Role of Packaging in Solid Waste Management 1966 to 1976. *PHS Publication No. 1855; by Arsen Darnay and William E. Franklin; 1969; 205 pages; \$2.25.* Presents, in three parts, the findings of a research effort to define the role of packaging in waste disposal in the 1966 to 1976 period. Part I presents historical packaging material consumption data for the 1958 to 1966

period, a forecast of packaging material consumption to 1976, and a discussion of the economic, technological, marketing, and demographic trends and forces underlying the forecast. Part II analyzes the disposability of packaging materials in 1966 and 1976. Discusses the quantitative solid waste burden imposed by packaging in the 2 years as well as collection problems engendered by packaging and packaging material resistance to disposal processing. Part III is an exploratory analysis of the various mechanisms that might be employed for mitigating the problems caused by packaging materials in waste disposal. Also contains two appendixes—Appendix I presents tabular materials which allow interested persons to follow the route by which the authors arrived at Disposal Resistance Index figures; Appendix II is a bibliography of literature used as background for this analysis.

Statistics From the National Health Survey

INTERNATIONAL COMPARISONS OF MEDICAL CARE UTILIZATION. A feasibility study. *PHS Publication No. 1000, Series 2, No. 33; June 1969; 74 pages; 70 cents.*

COMPARABILITY OF MARITAL STATUS, RACE, NATIVITY, AND COUNTRY OF ORIGIN ON THE DEATH CERTIFICATE AND MATCHING CENSUS RECORD, United States, May–August 1960. *PHS Publication No. 1000, Series 2, No. 34; May 1969; 47 pages; 50 cents.*

COMPARISON OF TIMED AND UNTIMED PRESENTATION OF THE GOODENOUGH-HARRIS TEST OF INTELLECTUAL MATURITY *PHS Publication*

No. 1000, Series 2, No. 35. June 1969; 16 pages; 30 cents.

USE OF HOSPITAL DATA FOR EPIDEMIOLOGIC AND MEDICAL-CARE RESEARCH. A report of the United States National Committee on Vital and Health Statistics. *PHS Publication No. 1000, Series 4, No. 11; June 1969; 9 pages; 25 cents.*

CURRENT ESTIMATES FROM THE HEALTH INTERVIEW SURVEY, United States, 1967. *PHS Publication No. 1000, Series 10, No. 52; May 1969; 73 pages; 70 cents.*

CHARACTERISTICS OF PERSONS WITH CORRECTIVE LENSES, United States, July 1965–June 1966. *PHS Publication No. 1000, Series 10, No. 53; June 1969; 44 pages; 50 cents.*

ACUTE CONDITIONS, INCIDENCE AND ASSOCIATED DISABILITY, United States, July 1967–June 1968. *PHS Publication No. 1000, Series 10, No. 54; June 1969; 59 pages; 60 cents.*

MARITAL STATUS AND LIVING ARRANGEMENT BEFORE ADMISSION TO NURSING AND PERSONAL CARE HOMES, United States, May–June 1964. *PHS Publication No. 1000, Series 12, No. 12; May 1969; 46 pages; 50 cents.*

REGIONAL UTILIZATION OF SHORT-STAY HOSPITALS, United States, 1965. *PHS Publication No. 1000, Series 13 No. 5; June 1969; 34 pages; 45 cents.*

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Public Health Service, Washington, D.C. 20201.

The Public Health Service does not supply publications other than its own.

DEMPSEY, JOHN J. (Johns Hopkins School of Hygiene and Public Health): *Proposed standard measure of recurrence of out-of-wedlock births to adolescents. Public Health Reports, Vol. 84, October 1969, pp. 839-844.*

Programs of service to adolescents who are pregnant out of wedlock have proliferated in recent years. Several researchers have reported followup studies with major or minor interest in recurrent illegiti-

mate births. Analysis of these studies reveals little similarity in measuring such recurrent events; consequently, the comparison of findings among programs is hazardous or impossible.

Within the specifications of administrative feasibility, relevance for service, and consonance with research designs, an incidence rate—number of repeat out-of-wedlock deliveries divided by the total number of index out-of-wedlock deliveries per 24 months after index delivery—has been recommended. Adoption of this measure will enhance the comparability of future findings.

FORTUINE, ROBERT (Public Health Service): *Availability and use of medical services in an Alaskan Eskimo community. Public Health Reports, Vol. 84, October 1969, pp. 845-856.*

A study of the availability and use of medical services during 1966 at Hooper Bay, an isolated Alaskan Eskimo community, revealed that the 535 people of this village depend almost entirely on a 65-bed hospital, 155 air miles away, for their medical care. Three types of medical service are available to this population: (a) hospitalization, (b) peri-

odic field clinics held by visiting physicians and other health workers, and (c) medical consultation by shortwave radio between the community health aide and the hospital staff.

Hospitalization rates in 1966 were higher for most age groups, particularly for children, than for the general U.S. population in 1964. The

field clinics, held at irregular intervals during the year, were used mostly for preventive examinations and for the care of chronic conditions, chiefly among the women.

Medical consultation by radio was the only available day-to-day means of contact with a physician. Most of the shortwave radio calls were concerned with illnesses or injuries of infants and preschool children. The Hooper Bay residents had an average of 2.9 physician contacts per person in 1966, 36 percent below the national average of 4.5 in 1964.

ECKSTROM, PHILIP T. (Menominee, Mich.), **BRAND, FRANK R.**, **EDLAVITCH, STANLEY A.**, and **PARRISH, HENRY M.**: *Epidemiology of stroke in a rural area. Second year of the Mid-Missouri Stroke Survey. Public Health Reports, Vol. 84, October 1969, pp. 878-882.*

The Mid-Missouri Stroke Survey was an epidemiologic study conducted by the University of Missouri Medical School, the Division of Health of Missouri, and the Public Health Service from July 1, 1963 to June 30, 1965. The study covered Boone, Cooper, and Howard Counties. Data were collected from physicians, hospitals, and death certificates to minimize underreporting.

In the second year of the study, 189 cases of stroke were revealed among persons over 25 years old. This is an age-adjusted rate of 2.2

per 1,000 persons based on the estimated 1964 population.

In the first year of the study the mortality rate for white persons was 33 percent for 1 week, 50 percent for 1 month, and 67 percent for 1 year. These rates were calculated on the basis of survival after the first major stroke during the year and were computed without regard to prior stroke experience or the number of strokes during the year.

In the second year case fatality rates for white persons for 1 week ranged from zero to 54 percent in

age-specific groups, with an overall rate of 46 percent. The 1-month case fatality rates ranged from zero to 76 percent, with an overall rate of 61 percent, and the 1-year case fatality rates ranged from zero to 81 percent, with an overall rate of 74 percent. Fewer younger patients in the second year led to the suspicion that milder strokes were not being reported, possibly as a result of waning interest of participating physicians.

Long term surveys of this type should be combined with professional education or community service to maintain the participants' motivation. The agency responsible for collecting data should have access to all sources.

HEWITT, DAVID (School of Hygiene, University of Toronto), **MILNER, JEAN,** and **CSIMA, ADELE:** *Some proposed "comparability areas" for U.S. statistics on causes of death. Public Health Reports, Vol. 84, October 1969, pp. 857-863.*

After becoming qualified at a particular medical school, physicians do not disperse uniformly all over the United States but tend to take up practice in circumscribed regions. Because of variations in diagnostic preferences and in the medical vo-

cabulary among medical schools, and consequently among their graduates, these geographic patterns of physician settlement can give rise to spurious differences between States in statistics on causes of death. An index is therefore proposed for

measuring the degree of comparability between any pair of States, together with a method for building up "comparability areas" in which interstate comparisons will have some assurance of validity. Fourteen comparability areas are proposed, based on the known geographic distributions of medical school alumni in 1959. All but 13 States have a place in one or more of these areas.

JEKEL, JAMES F. (Yale University School of Medicine), **GREENBERG, RICHARD A.,** and **DRAKE, BENJAMIN M.:** *Influence of the prevalence of infection on tuberculin skin testing programs. Public Health Reports, Vol. 84, October 1969, pp. 883-886.*

The primary component of the new child-centered approach to the prevention of tuberculosis is the tuberculin skin testing of all children at least twice during their school experience. Multiple puncture tuberculin skin tests have operating advantages over the intradermal PPD (Mantoux) test for large-scale screening programs. The multiple puncture tests, however, have not always been accepted, primarily because of doubts regarding their accuracy. These doubts have arisen, in

part, from field experience in which many false positive multiple puncture tests were noted when persons were retested with the more definitive PPD (Mantoux) test. A relatively large number of false positive tests are observed because the multiple puncture test is properly designed to be very sensitive and also because these tests are usually performed on school populations with a very low prevalence of tuberculosis infection.

In screening programs conducted

in populations with a low prevalence of infection, a relatively high proportion of false positive tests are inevitably found among the screening positives. Such a result is to be expected and does not negate the value of the screening test, as experience from a countywide skin testing program in North Carolina demonstrates. Screening school children with a tuberculin tine test and then following up those children whose tests are positive with an intradermal PPD test was found to be an approach well accepted by public health professionals and the community. The cost was approximately 50 cents per child tested, or about 8 cents per year per child in school.

CHERRY, WILLIAM B. (Public Health Service), and **THOMASON, BERENICE M.:** *Fluorescent antibody techniques for Salmonella and other enteric pathogens. A status report. Public Health Reports, Vol. 84, October 1969, pp. 887-898.*

Industrial and public health laboratories are seeking to develop a reliable fluorescent antibody (FA) test for the detection of salmonellae in foods, feeds, and raw materials. Results indicate that conjugates prepared from OH serums may be useful in screening selective enrichment media for salmonellae. More information is needed, however, before

specific recommendations can be made. However, a reliable FA test has been developed for detecting *Salmonella typhi* in fecal specimens from chronic carriers and from persons with acute typhoid fever.

Several groups have evaluated conjugates for *Shigella flexneri* and *Shigella sonnei*. One difficulty in using *Shigella* conjugates is the in-

ability to isolate *S. flexneri* from many of the FA positive specimens. Whether this difficulty is due to false positive FA reactions or to failure of isolation procedures is not clear. The *S. sonnei* reagent has proved both sensitive and specific.

FA tests for enteropathogenic *Escherichia coli* are well adapted to the diagnosis and surveillance of infant diarrhea. The tests have proved to be 10 to 100 times more sensitive than cultural procedures. FA examinations, however, should be restricted to specimens from children up to 2 years of age.

HEALY, GEORGE R. (National Communicable Disease Center, Public Health Service), **GLEASON, NEVA N., BOKAT, ROBERT, POND, HARRY, and ROPER, MARGARET:** *Prevalence of ascariasis and amebiasis in Cherokee Indian school children. Public Health Reports, Vol. 84, October 1969, pp. 907-914.*

Single stool specimens, collected from each of 631 children at the Cherokee Indian Elementary School, Cherokee, N.C., were examined for intestinal parasites. The organisms identified and their prevalence were as follows: *Ascaris lumbricoides*, 49 percent; *Trichuris trichiura*, 38 percent; hookworm, 3 percent; *Entamoeba histolytica*, 11 percent; *Entamoeba hartmanni*, 35 percent; *Entamoeba coli*, 40 percent; *Endolimax nana*, 46 percent; *Iodamoeba bütschlii*, 5 percent; *Giardia lamblia*, 9 percent; *Dientamoeba fragilis*, 11

percent; *Chilomastix mesnili*, 3 percent; and *Trichomonas hominis*, 11 percent.

Evidence of infection with one or more parasites was found in 92 percent of the children. The amebic prevalence rate, which can be used to measure the extent of ingestion of organisms through fecal contamination, was 74 percent. There was no difference in the prevalence of *A. lumbricoides* or *T. trichiura* between Indian boys and girls. Although there was a slight reduction in the prevalence of some parasites

(*A. lumbricoides*, *T. trichiura*, and *G. lamblia*) in children of the higher elementary grades as compared with the lower ones, in many cases an equal or greater number of children in the higher grades were parasitized with *E. histolytica* and *E. hartmanni* as compared with children in the lower grades. In general, the survey revealed a high prevalence of intestinal parasites in children throughout the eight grades of the school.

An indirect hemagglutination test for amebiasis was used to detect antibody in the serums of 617 of the children. The results revealed no cross reactions with any other intestinal parasites. They also indicated that this test was of little value in asymptomatic intestinal amebiasis.

MACKAY, RICHARD A. (Boston College Graduate School of Social Work), **TASCHMAN, HARVEY A., and KISIELEWSKI, JULIE:** *An analysis of requests for help to a mental health study center. Public Health Reports, Vol. 84, October 1969, pp. 923-928.*

An analysis was made of 365 inquiries for help from persons who telephoned or came to a mental health study center on their own initiative between October 1, 1961, and December 31, 1963. Most were seeking help for themselves or for family members.

A one-page schedule, containing a condensed version of what the person had told the social worker who talked with him, was the source of the data. Each author coded one primary problem in each case, although there could be multiple secondary problems and symptoms. If judgments were not unanimous, a two-thirds majority of the authors determined the coding category of the problem.

The authors classified problems as (a) intrapersonal conflict—specific somatic complaints such as headaches, irrational or bizarre thoughts, nervous habits (such as hair pulling), and negative or hostile feelings, (b) intrafamilial conflicts—marital tension, parent-child conflict, and conflicts with other relatives such as aunts and uncles, (c) extrafamilial conflicts—underachievement at school, inability to work adequately, and delinquent behavior in the community, and (d) other—requests for technical and financial information and requests for information on community resources and on the hospitalization of persons with psychiatric problems.

In analyzing the difficulties as per-

ceived by the callers, the following differences were statistically significant.

Mothers who called about problems of a child were more likely to describe the problems in extrafamilial terms than were other callers.

The problems of persons under 20 years of age were more likely to be described in extrafamilial terms, while those of persons more than 20 years of age were more likely to be described in intrapersonal terms.

Among referral sources the only significant differences were for professional persons in schools. Callers who were referred by school personnel tended to express the difficulties in extrafamilial terms.

Because of the special needs of the callers and the need for immediate diagnostic understanding and intervention, the analysis suggests that skilled professionals should answer incoming calls for help.